Maurer School of Law: Indiana University
Digital Repository @ Maurer Law

Indiana Law Journal

Volume 90 | Issue 1 Article 6

Winter 2015

Fixing Failure to Warn

Aaron D. Twerski
Brooklyn Law School, aaron.twerski@brooklaw.edu

James A. Henderson Jr.
Cornell Law School, jah44@cornell.edu

Fixing Failure to Warn

AARON D. TWERSKI* & JAMES A. HENDERSON, JR.**

INTRODUCTION

Failure to warn remains a doctrine in distress. More than two decades ago, we published an article criticizing the law governing product warnings for being little more than an "empty shell," allowing claims that need only be asserted rhetorically to reach the jury.[1] Afterward we served as reporters for the *Restatement (Third) of Torts: Products Liability* ("*Restatement (Third)*"), helping to write black-letter rules covering product warnings and a number of other subjects. Working on the *Restatement (Third)* project required coming to terms with the similarities and differences between defective design and failure to warn.[2] One important difference

---

* Aaron D. Twerski, Irwin and Jill Cohen Professor of Law, Brooklyn Law School.
** James A. Henderson Jr., Frank B. Ingersoll Professor of Law, Emeritus, Cornell Law School.

The authors gratefully acknowledge the research assistance of Imre Ilyes (Brooklyn 2015) and Christopher Conroy (Brooklyn 2015).

1. James A. Henderson, Jr. & Aaron D. Twerski, *Doctrinal Collapse in Products Liability: The Empty Shell of Failure to Warn*, 65 N.Y.U. L. REV. 265 (1990). The article was well received. *See Seventy-Fifth Anniversary Retrospective: Most Influential Article*s, 75 N.Y.U. L. REV. 1517, 1558 (2000) (recognizing the aforementioned article as one of the twenty-five most influential articles published by the *New York University Law Review* over the last seventy-five years).

2. In design cases, for example, it is no defense that the danger presented by the product is open and obvious; if an obvious danger can be avoided by the adoption of a reasonable alternative design, the product may be defective. RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. § 2 cmt. d (1998); *see also, e.g.*, Micallef v. Miehle Co., 348 N.E.2d 571, 575 (N.Y. 1976). Where a claim is based on failure to warn, the claim fails if the danger presented by the product is open and obvious because the product's obvious danger serves as a warning. RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. § 2 cmt. j (1998); *see also, e.g.*, Weiner v. Am. Honda Motor Co., 718 A.2d 305, 310 (Pa. Super. Ct. 1998). Furthermore, "when a safer design can reasonably be implemented and risks can reasonably be designed out of a product, adoption of the safer design is required over a warning that leaves a significant

relates to what the plaintiff must prove to establish a product defect. Regarding design-based liability, except for designs that are manifestly self-defeating[3] or that fail to conform to valid safety regulations,[4] most American courts require plaintiffs to prove that (1) a specifically identified reasonable alternative design (RAD) was available at the time of commercial distribution, (2) failure to adopt the RAD rendered the design not reasonably safe, and (3) adoption of the RAD would have reduced or prevented the plaintiff's harm.[5] Regarding alleged failures to warn, many courts impose no parallel burdens on the plaintiff; in those jurisdictions, the plaintiff need only assert in conclusory fashion that the defendant's warnings of nonobvious product-related risks were inadequate, without specifying exactly what warning the defendant should have given or proving that a different warning would have done any good.[6]

The *Restatement (Third)* reflects this important difference by requiring a specifically identifiable RAD in its black-letter rule governing design while imposing no parallel requirement in connection with warning claims.[7] With regard to failure to warn, neither the *Restatement (Third)* black letter nor the official comments explicitly require that the plaintiff articulate a reasonable alternative warning (RAW) in order to establish a prima facie case.[8] Two reasons help to explain this difference in treatment. First, as will be discussed in Part II, much of the case law in the 1980s and '90s did not appear to impose a RAW requirement in connection with warnings. And second, in many failure-to-warn cases the

---

residuum of such risks." RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. § 2 cmt. l (1998); *see also, e.g.*, Uniroyal Goodrich Tire Co. v. Martinez, 977 S.W.2d 328, 336–37 (Tex. 1998).

3. Such self-defeating defects do not require the plaintiff to proffer a reasonable alternative design. *See* RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. § 2 cmt. b (1998); JAMES A. HENDERSON, JR. & AARON D. TWERSKI, PRODUCTS LIABILITY: PROBLEMS AND PROCESS 189–91 (7th ed. 2011); *see also* Michael D. Green, *The Unappreciated Congruity of the Second and Third Torts Restatements on Design Defects*, 74 BROOK. L. REV. 807 (2009).

4. RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. § 4(a) (1998).

5. *See* David G. Owen, *Design Defect Ghosts*, 74 BROOK. L. REV. 927, 931 (2009) (recognizing that most jurisdictions require "only that manufacturers design their products as safe as they are reasonably able to do"); Aaron D. Twerski & James A. Henderson, Jr., *Manufacturers' Liability for Defective Product Designs: The Triumph of Risk-Utility*, 74 BROOK. L. REV. 1061, 1079–93 (2009) (surveying all jurisdictions and finding that an overwhelming majority require a showing of RAD).

6. *See infra* Part II.

7. *Compare* RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. § 2(b) (1998) (referring to "the adoption of a reasonable alternative design" that would have reduced or avoided "the foreseeable risks of harm"), *with id.* § 2(c) (referring to "reasonable instructions or warnings" that could have "reduced or avoided" the "foreseeable risks of harm"). Although section 2(c) could be interpreted as imposing a RAW requirement, interpreting the absence of the word "alternative" in light of the official comments to section 2(c) would allow a court to focus on the shortcomings of the actual warnings without necessarily considering the specifics of a better alternative. *See infra* note 8.

8. *See* RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. § 2 cmt. i (1998) (indicating that the "plaintiff must prove that adequate instructions or warnings were not provided"). Not only is this instruction compatible with the plaintiff not suggesting a RAW, but the same comment may be seen implicitly to denigrate the notion of the plaintiff offering a RAW when it asserts that "the ability of a plaintiff to imagine a hypothetical better warning . . . does not establish that the warning actually accompanying the product was inadequate." *Id.*

defendant's marketing scheme provides no actual warning to which the plaintiff's proposed warning could be said to be an "alternative." All products are distributed with designs, but not all products are distributed with warnings. Thus it seemed to us and our advisers awkward to invoke the concept of an "alternative warning" as was done in connection with allegedly inadequate designs.[9] For these reasons coupled with an underestimation of the stakes involved, the *Restatement (Third)* black-letter law and comments provide a less rigorous test for failure to warn than for defective design and allow courts to decide whether the plaintiff must specify what, by way of a more adequate instruction or warning about product-related risks, the defendant should have communicated to those who manage the relevant risks. Courts might have developed the concept of a RAW without explicit support from the *Restatement (Third)*, and some have done so.[10] But most have not.[11]

As this Article will explain, we now conclude that the same rigor necessary for the plaintiff to establish a prima facie design defect case should be required for alleged failures to warn. The plaintiff asserting a warning claim should be required to specify (by suggesting a RAW) exactly how the defendant or a predecessor in the distributive chain should have effectively communicated product-related risks, and to prove (subject to an appropriately adjusted version of the heeding presumption)[12] how the RAW would have reduced or prevented the plaintiff's harm. From a broader perspective (perhaps aided and abetted by our earlier work), too much has been made of the differences between design and warning, and not enough has been made of their similarities. This Article aims to set things right. Part I establishes the conceptual groundwork for this adjustment in perspective. It explains how, notwithstanding some interesting differences, design and warning claims share very similar foundations. Part II demonstrates that the failure to provide a RAW has resulted in the imposition of liability without proof of causation. Part III discusses cases that actually require a RAW. Part IV sets forth our proposal for a RAW.

I. DESIGN AND WARNING CLAIMS SHARE THE SAME FOUNDATIONAL ELEMENTS

The objective here is to describe the basic elements that product design and warning claims share and explain how those elements serve similar risk-reduction functions. This analysis is essentially descriptive; it does not attempt to connect risk reduction with overarching normative goals, such as efficiency or fairness. It assumes that others have made or will make those connections and is content to demonstrate that both design and warning claims, rooted in generic product risks, share similar elements that function similarly in reaching the same risk-reduction ends.[13] Based on this demonstration, the analysis concludes that the legal doctrines

---

9. In drafting the *Restatement (Third)*, the American Law Institute appointed an official group of advisers drawn from plaintiff and defense bar, the judiciary, and law professors with expertise in the field of products liability. They met regularly with the reporters and reviewed all section and comment drafts. For a list of these reporters and advisers, see RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB., at v (1998).

10. *See infra* Part III.

11. *See infra* Part II.

12. *See infra* note 58 and accompanying text.

13. This instrumental commitment to risk reduction does not mean that products liability

governing both design and warning claims should, based on their shared internal logic, be treated in basically the same fashion. As this Article will make clear, the earlier analyses of the practical differences between design and warning litigation remain valid, but the failure of those analyses to adequately acknowledge the theoretical, foundational similarities, and thus the legitimacy of a RAW requirement, must be corrected. Manufacturing defects are not considered in this analysis because they do not involve generic risks; while remedies for such defects aim toward risk reduction, they do so by taking a different path that calls for different doctrinal treatment.[14] And proximate causation is similarly omitted; it is an element shared by all tort claims and sheds no light on a comparison between product design and failure to warn.[15]

A. An Overview of Liability for Generic Product Risks: The Building Blocks of Defect and Actual Causation

Both design and warning claims are premised on the primary building-block concept of the untaken precaution—a generic safety feature that, when omitted by the commercial product distributor, renders the product not reasonably safe.[16] In the products liability context, the omitted safety feature is a hypothetical adjustment in the product actually distributed—a marginally safer design or better warning that the plaintiff insists should have been adopted by the distributor or a predecessor.[17] It does not include an entirely different category of product that might have been substituted for the product distributed by the defendant.[18] The concept of the untaken precaution originated in negligence law,[19] but it is equally relevant under strict liability as the doctrinal basis of liability for generic product defects.[20] The point here is simply that,

---

necessarily reflects the ultimate goal of achieving allocative efficiency. Even if the ultimate goal were achieving fairness or justice, risk reduction could be a means of achieving those noninstrumental goals. *See, e.g.*, Ernest J. Weinrib, *Deterrence and Corrective Justice*, 50 UCLA L. REV. 621, 629 (2002) (suggesting that instrumental means are compatible with noninstrumental ends as long as they are conceptually sequenced so that the former give way when the two come into conflict).

14. *See* GUIDO CALABRESI, THE COSTS OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS 68–75 (1970) (explaining how imposing strict liability for harm caused by manufacturing defects achieves "general" or market deterrence whereby, once defect-related accident costs are shifted to commercial product distributors, marketplace competition pressures distributors to achieve optimal levels of both quality control and production).

15. *See* RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. § 15 (1998) (taking no specific position on causation in products liability cases, but referring generally to prevailing rules and principles governing causation in tort).

16. *See generally* Mark F. Grady, *Untaken Precautions*, 18 J. LEGAL STUD. 139 (1989) (suggesting that the untaken precaution is the central concept of negligence law).

17. *See supra* note 5 and accompanying text.

18. American courts do not impose tort liability based on unreasonably unsafe categories of products. *See generally* James A. Henderson, Jr. & Aaron D. Twerski, *Closing the American Products Liability Frontier: The Rejection of Liability Without Defect*, 66 N.Y.U. L. REV. 1263 (1991).

19. *See generally* Grady, *supra* note 16.

20. Although many courts purport to impose "strict liability" for generic product defects, the defects are determined by an essentially fault-based analysis. *See* RESTATEMENT (THIRD) OF

in connection with both design and warning claims under either negligence or strict liability, the plaintiff must establish that a safety feature that the defendant could have and should have adopted was omitted, thereby causing the product to be not reasonably safe. Historically, courts have chosen to distinguish between design and marketing defects, and we certainly have no quarrel with that choice.[21] The conceptual distinction between mechanical defects and generic hazards is critical; but we now believe that too much has been made of the difference between design and failure to warn. Courts might have enhanced conceptual clarity by treating design and warning as subsets of a single concept of "generic defect."[22]

The second basic building block in products liability is actual causation.[23] Assuming that the plaintiff shows that the defendant or a predecessor should have adopted a particular generic safety feature, the plaintiff must also show that adoption of the feature would have made a difference—that it would have avoided part or all of the plaintiff's harm. This element of actual causation divides into two sub-elements. Regarding the first of these sub-elements of causation (general causation), the safety feature proffered by the plaintiff must reduce the relevant risks of harm by changing the circumstances affecting would-be victims, which may include the behavior of persons who control the relevant risks.[24] In virtually all cases other than those involving the systemic effects of drugs and other toxics—in all cases, for example, involving the traumatic effects of tangible products—this sub-element of general causation is not an issue.[25] Once an omitted aspect of the product design or marketing of a tangible product qualifies as an untaken precaution, it must by definition be inherently capable of reducing the relevant risks of harm.

Regarding the second sub-element of actual causation, commonly referred to as "specific causation," the plaintiff must show that if the product distributor had adopted the hypothetical precaution, it would have prevented the relevant risks from materializing in harm to the particular plaintiff.[26] This second sub-element is far more likely to be an issue than the first. Even if an untaken precaution would have reduced the relevant risks as a general matter, thereby satisfying the requirement of general causation, it may not have helped a particular plaintiff. In cases involving the traumatic effects of tangible products, these two sub-elements of actual causation tend to

---

TORTS: PRODS. LIAB. § 2 cmt. d (1998) (indicating that an approach under RAD analysis "is also used in administering the traditional reasonableness standard in negligence").

21. Indeed, the authors embraced this distinction in RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. § 2 (1998).

22. Design and failure to warn would have been important subsets. As suggested earlier, manufacturing defects are not generic but rather exist in individual product units. *See* HENDERSON & TWERSKI, *supra* note 3, at ix (organizing the topics of manufacturing defects and generic product risks in separate parts, the latter of which contains separate chapters covering design and warnings).

23. *See id.* at 154–67; DAVID G. OWEN, PRODUCTS LIABILITY LAW § 11.1 at 732 n.17 (2005).

24. A proffered safety feature may affect the circumstances of product use by either building into the design a tangible, harm-avoidance measure or helping, by warnings or otherwise, to induce safer behavior on the parts of product users, consumers, and others who are in positions to reduce risks. *See* HENDERSON & TWERSKI, supra note 3, at 171–80.

25. *See* JAMES A. HENDERSON, JR., RICHARD N. PEARSON & DOUGLAS A. KYSAR, THE TORTS PROCESS 110–11 (8th ed. 2012).

26. *See* HENDERSON & TWERSKI, *supra* note 3, at 126–27.

collapse into a single "but for the lack of the safety feature" element. But in many cases involving chemically induced systemic harms, distinguishing between general risk reduction and the prevention of particular harm improves analytical clarity.[27]

B. The Building Blocks in Action: Design and Warning Claims Are More Similar Than They Might at First Appear

1. The Element of Product Defect

As we made clear more than twenty years ago, untaken precautions in the form of omitted safety features in design-defect litigation typically call for expert application of the applied sciences and are relatively costly to implement.[28] Thus, when the plaintiff claims that the defendant manufacturer's motor vehicle should have been designed to include features that would give occupants a greater chance to survive high-speed collisions, both the cost of engineering the new risk-reducing design and the cost of prosecuting the claim in court are likely to be substantial.[29] Regarding the design features that the plaintiff insists should have been included, American courts require the plaintiff to prove with considerable exactness what the features are, how they would function to reduce risks of harm, and why the overall reductions in risks justify the costs of incorporating the safety features.[30] Only in the relatively rare circumstance when a product design fails dangerously to perform its manifestly intended function—only when the design could be said to be "self-defeating"[31]—are the costs of untaken precautions likely to be modestly low.

Compared with claims of unsafe design, claims that the marketing of the product was unreasonably unsafe often rely on untaken precautions that are significantly less costly for product manufacturers to implement. After all, how great could be the marginal costs of adding a few attention-grabbing verbal modifiers and an exclamation point or two? Although adding cautionary language to a marketing communication may on first encounter appear to be a relatively low-cost safety feature, it is fallacious to go so far as to say that warnings are by their nature practically cost free.[32] Adding warnings and instructions may generate a variety of increased delivery costs[33] and may cause the aggregate informational package to

---

27. *See, e.g.*, King v. Burlington N. Santa Fe Ry. Co., 762 N.W.2d 24, 34 (Neb. 2009).

28. *See* Henderson & Twerski, *supra* note 1, at 293.

29. *See* RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. § 2 cmt. f (1998) (reflecting concern for the costs of expert testimony by explicitly recognizing that neither experts nor prototypes are required in all cases).

30. *See id.* § 2 cmt. d (stating "[s]ubsection (b) adopts a reasonableness ('risk-utility balancing') test as the standard for judging the defectiveness of product designs"); *see also, e.g.*, Smith v. Louisville Ladder Co., 237 F.3d 515, 518 (5th Cir. 2001); Timpte Indus., Inc. v. Gish, 286 S.W.3d 306, 311 (Tex. 2009).

31. *See supra* note 3.

32. *See, e.g.*, Cotton v. Buckeye Gas Prods. Co., 840 F.2d 935, 937–38 (D.C. Cir. 1988) (rejecting the idea that additional warnings are "virtually cost free"); Henderson & Twerski, *supra* note 1, at 292–94.

33. *See, e.g.*, Williams v. Super Trucks, Inc., 842 So. 2d 1210 (La. Ct. App. 2003) (finding that a warning could not be attached to a crankshaft); Broussard v. Cont'l Oil Co.,

exceed the capacities of foreseeable consumers to understand and respond effectively.[34] Moreover, variables such as how an adequate warning should have described the risk, the size and prominence of the warning, and the means by which the warning should have been communicated (e.g., verbal or pictorial, on the product or in a user's manual) are crucial in deciding whether the warning proposed by the plaintiff would have been practically useful and worth its costs. Other product-related risks of equal or even greater magnitude may have also deserved warnings, which may have presented logistical difficulties as well as corresponding increases in costs and decreases in effectiveness.[35] At the extreme, giving a multiplicity of warnings may lead consumers to disregard all of them.[36] In the latter circumstance, the costs of additional warnings could be very great indeed.

A caveat is in order. Even if increasing the scope or intensity of warnings is more costly than it might at first be assumed, supplying alternative product warnings is less costly than supplying alternative product designs in one important respect. The authors have explained elsewhere how the elements of product design are inescapably interdependent, such that changing one element usually creates ripple effects throughout many other elements and thus requires a rearrangement of essentially the entire design.[37] The same implications are less likely to occur in connection with proposed changes in product warnings. The question of whether the marketing of a product might have included the identification of an additional risk or risk avoidance measure, or greater emphasis on certain risk information, is less likely to produce the sorts of ripple effects that create difficulties for courts.[38]

Given that a large majority of courts impose a RAD requirement in connection with design defects,[39] it is interesting that most courts have not traditionally required plaintiffs to assert a RAW—to specify *exactly* what the product distributor should have communicated by way of greater risk information.[40] Requiring a RAD in design litigation sharpens the in-court analysis of what it would cost to make a design safer and whether it would have been worth those costs to make a design

---

433 So. 2d 354 (La. Ct. App. 1983) (finding that additional warnings would not fit on the handle of an electric drill).

34. *See generally* A.D. Twerski, A.S. Weinstein, W.A. Donaher & H.R. Piehler, *The Use and Abuse of Warnings in Products Liability—Design Defect Litigation Comes of Age*, 61 CORNELL L. REV. 495, 513–17 (1976). For a review of the social science literature that examines the efficacy of warnings and the variables that may affect end-user decisions as to how to use a product, see Aaron D. Twerski & Neil B. Cohen, *Resolving the Dilemma of Nonjusticiable Causation in Failure-To-Warn Litigation*, 84 S. CAL. L. REV. 125, 132–36 (2010); *see also* Ford Motor Credit Co. v. Milhollin, 444 U.S. 555, 568 (1980) ("*Meaningful* disclosure does not mean *more* disclosure. Rather, it describes a balance between 'competing considerations of complete disclosure . . . and the need to avoid . . . [informational overload].'" (alteration in original) (emphasis in original) (citations omitted)).

35. *See supra* notes 33–34 and accompanying text.

36. *See supra* note 32 and accompanying text.

37. James A. Henderson, Jr., *Judicial Review of Manufacturers' Conscious Design Choices: The Limits of Adjudication*, 73 COLUM. L. REV. 1531, 1540 (1973); James A. Henderson, Jr. & Aaron D. Twerski, Commentary, *Stargazing: The Future of American Products Liability Law*, 66 N.Y.U. L. REV. 1332, 1335 & nn.18–20 (1991).

38. *See* Henderson & Twerski, *supra* note 1, at 293.

39. *See supra* note 5 and accompanying text.

40. *See infra* Part II.

safe enough to have reduced or prevented the plaintiff's harm. Would requiring the plaintiff to specify a RAW in failure-to-warn litigation similarly affect a court's cost-benefit assessment of whether the product distributor should have provided greater marketing safeguards? We submit that this might well be the case inasmuch as a "spell it out in detail" requirement would help to highlight the delivery costs and cognitive-overload considerations described earlier.[41] Without a RAW requirement, the plaintiff is more likely to be able to have it both ways—to play up the need for a more forceful warning in the abstract while playing down or ignoring altogether the sorts of real-life costs, monetary and nonmonetary, that requiring more forceful warnings would generate. Plaintiffs cannot so easily play that sort of shell game with claims of bad design given the widespread requirement that the plaintiff establish a RAD.[42] Requiring a RAW might have much the same effects in connection with claims of defective product marketing.

Admittedly, requiring a RAW implies a measure of arbitrariness that requiring a RAD does not. Thus, a number (often a large number) of warning variations are typically available to product distributors by which to communicate information about a given risk, which is less likely to be the case in connection with design alternatives.[43] It may seem to follow that requiring the plaintiff to choose one among an apparently large number of equally effective warning variations is arbitrary in a way that requiring a RAD is not.[44] But such is not the case. Requiring the plaintiff to identify specifically what, how, and to whom the defendant-distributor should have communicated additional risk information quite legitimately contributes to achieving a more sensible, realistic assessment of the costs and benefits associated with providing allegedly better warnings. Not only would a RAW help to highlight the costs associated with a better warning,[45] but a RAW would also help to reveal any weaknesses in the plaintiff's claim of but-for causation.[46]

2. The Element of General Causation

The first of the two elements of actual causation—whether inclusion of the additional safety feature proffered by the plaintiff would have reduced the risks of harm to those in the plaintiff's position—is clear in most instances.[47] Assuming that the plaintiff has established that an omitted precaution should have been included in the design or marketing of the product, by definition the plaintiff will have

---

41. *See supra* notes 32–34 and accompanying text.

42. *See supra* note 5 and accompanying text.

43. Given that the plaintiff may not offer a RAD in the form of a different product category, *see supra* note 18 and accompanying text, typically there are only a limited number of ways to adjust the defendant's product marginally so as to have prevented or reduced the plaintiff's harm. Regarding alternative warning claims, by contrast, the plaintiff may construct a wide range of better warnings, constrained only by common sense and the meaning of language.

44. With regard to a RAD, the plaintiff's choices are obviously constrained by the existing design—there are only a limited number of ways that defendant's design may be marginally adjusted. *See supra* note 30 and accompanying text.

45. *See supra* notes 32–33 and accompanying text.

46. *See infra* text accompanying note 56.

47. *See supra* note 25 and accompanying text.

established that such inclusion would have reduced the relevant risks. The only exceptions involve harms caused systemically (rather than traumatically) by drugs, toxics, and other chemical compounds where, even if a given chemical should have been safer as a general proposition, it may be scientifically unclear whether the compound is capable of causing the sort of harm suffered by the plaintiff.

In those cases, general causation is often a separately contested issue.[48] Interestingly, cases involving drugs and toxics are almost always brought by plaintiffs on the basis of alleged failures to warn.[49] Thus, it is a fair assessment that general causation is an issue that, when it arises, almost always involves alleged failures to warn rather than defective designs.

3. The Element of Specific Causation

The second of the two elements of actual causation concerns whether inclusion of the risk-reducing safety feature proffered by the plaintiff would have prevented part or all of the particular plaintiff's harm. Regarding design claims, the RAD proposed by the plaintiff may work to reduce or prevent harm without risk-reducing inputs from human actors such as persons using the product or bystanders exposed to harm as a consequence of product usage. Thus, a RAD may function to render a vehicle design more crashworthy without relying on drivers or would-be crash victims cooperating in any way.[50] In that instance, the issue of specific causation would be whether, on the facts of the particular case, the added design safety provided by the RAD would have prevented the plaintiff's harm. Of course, post-distribution cooperation from a risk manager (e.g., a user or consumer of the product) may be a necessary component of a plausible design-based scheme to prevent harm, as when a seat belt requires vehicle occupants to "buckle up."[51] Regarding such design features, the plaintiff must show not only that the safety feature, once put in play, would have prevented harm, but also that a risk manager would have put the feature in play. To be sure, supplying seat belts in a vehicle reduces the risks of accident-related harm by offering buckle-up options; but passive passenger restraints such as air bags are thought to be more effective precisely because they function to prevent harm even when would-be accident victims are passively noncooperative.[52] In effect, RADs that reduce risk without

---

48. *See supra* note 25 and accompanying text.

49. *See* RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. § 6 cmt. a (1998) (explaining that courts traditionally have imposed liability for generic risks of prescription drugs only in cases involving failures to warn). A recent trend favoring design-based liability for drug design rests on a fairly narrow rule. *See id.* § 6(c). *See generally* James A. Henderson, Jr. & Aaron D. Twerski, Essay, *Drug Designs* Are *Different*, 111 YALE L.J. 151 (2001). Liability for generic risks inherent in chemicals and other toxic raw materials is also traditionally based exclusively on failure to warn. *See* RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. § 5 cmt. c (1998).

50. Crash victims may contribute to risk reduction by avoiding crashes, but that sort of contribution does not render the vehicle design more crashworthy.

51. Threatening would-be victims with barriers to recovery based on contributory negligence and assumption of risk pressures them to cooperate. And pressuring defendant product sellers with liability based on failures to instruct and warn helps encourage cooperation.

52. *See* Geier v. Am. Honda Motor Co., 529 U.S. 861, 876–81 (2000) (discussing the history

requiring the post-distribution cooperation of human beings paternalistically impose increased safety on would-be victims whether or not they like it or are even aware that risk reduction is happening.

Regarding proposed safety features that consist of omitted warnings about product-related risks, altering the conduct of those to whom the warnings are addressed is always a necessary element of the harm-prevention scenario; increased safety from better product marketing can never be automatic or "forced," as is often possible by the adoption of a safer product design. Thus, every failure-to-warn claim rests on an assertion by the plaintiff that, as with a seat belt that must be buckled to be effective, if the product distributor had supplied a more adequate warning, the person in control of the risk would have responded cooperatively and the response would have reduced or prevented the harm suffered by the plaintiff. It follows that just as air bags are, in a manner of speaking, preferable to seat belts because passive, designed-in restraints leave less opportunity for vehicle occupants willfully or inadvertently to expose themselves to risks of harm,[53] design modifications, all else being equal, are preferable to marketing modifications from the standpoint of increasing product safety.[54]

In asserting a warning claim, the plaintiff must establish specific causation by showing that reasonable product marketing would have reduced or prevented his harm.[55] Requiring the plaintiff to identify a RAW—to specify what the defendant should have issued by way of an adequate warning—would add to the clarity of the analysis necessary to determine but-for specific causation. Quite simply, proof of a RAW would allow the tribunal to compare the specifics of the RAW against the specifics of the actual marketing of the defendant's product, instead of trying to intuit its way to a conclusion regarding specific causation based on vague allegations that some sort of unspecified warnings would have actually prevented the plaintiff's harm.[56] Answering the question of whether the addressee of a particular RAW would have responded cooperatively in an effort to prevent the plaintiff's harm is inherently speculative, especially when the addressee is not available as a witness.[57] Therefore, it would be appropriate for courts to recognize a presumption that a RAW would have made a difference, subject to rebuttal based on direct or circumstantial evidence.[58] Such a presumption would be available only in connection with specific causation; it would make no sense in the context of general causation.[59]

---

of how automobile airbag regulations phased in passive restraints as preferable over seat belts).

53. Of course, air bags are not meant to replace seat belts; both are necessary to provide maximum protection in case of a crash. Yet unlike seat belts, air bags do not require the cooperation of the passenger to attain greater safety.

54. *See* RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. § 2 cmt. l (1998) (suggesting that a safer design is preferable over a warning that leaves significant residuum of risk).

55. *See* HENDERSON & TWERSKI, *supra* note 3, at 396–99.

56. *See supra* note 38 and accompanying text. Requiring a RAW would force plaintiffs to be more careful about selecting better warnings that would have prevented the harms in question.

57. This would be true when the addressee is either killed or severely disabled.

58. This is commonly referred to as the "heeding presumption." The first case to adopt a heeding presumption was *Technical Chemical Co. v. Jacobs*, 480 S.W.2d 602, 606 (Tex. 1972). Other states have followed suit. *See, e.g.*, Nissen Trampoline Co. v. Terre Haute First Nat'l Bank, 332 N.E.2d 820, 826 (Ind. Ct. App. 1975), *rev'd on other grounds*, 358 N.E.2d 974 (Ind. 1976); Coffman v. Keene Corp., 628 A.2d 710, 720 (N.J. 1993); Seley v. G.D. Searle & Co., 423 N.E.2d 831, 838 (Ohio 1981); Cunningham v. Charles Pfizer & Co., 532

C. A Brief Summary: Some Differences Between Design and Warning Claims Matter More Than Others

The foregoing analysis supports the conclusion that, notwithstanding the important practical differences identified elsewhere,[60] design and warning defects comprise the same basic components functioning in essentially similar fashion: untaken precautions that would have increased the safety of product use and consumption and reduced or even prevented the plaintiffs' harm. Many design precautions are—as all warning precautions are not—capable of reducing risks of harm without any cooperation on the part of users, consumers, or other risk managers. But besides supporting a general preference for reducing product risks by modifying designs rather than increasing warnings,[61] this difference has no fundamental consequences relevant to this Article's analysis. Nor does the fact that general causation traditionally arises only in the context of failure to warn.[62] These differences support the notion that it is useful to maintain the traditional distinction between design and warning. But these differences do not justify imposing significantly different burdens on plaintiffs when establishing the centrally important element of product defect. Thus, based on this Article's analysis, the same tort liability regime that requires a plaintiff in a design case to identify and prove a RAD should require the plaintiff in a warning case to identify and prove a RAW. The authors arguably should have built such a requirement into their earlier article and into the *Restatement (Third)*, for which they served as reporters. The *Restatement (Third)* is consistent with a RAW requirement, but does not explicitly impose one.[63] In any event, three tasks remain to be accomplished in the present endeavor: first, to use selected products liability decisions to demonstrate how a RAW requirement could improve failure-to-warn litigation; second, to identify case law that supports requiring the plaintiff to establish a RAW; and third, to describe what a RAW requirement should look like going forward.

P.2d 1377, 1382 (Okla. 1974). Several jurisdictions, however, have refused to adopt a heeding presumption. *See, e.g.*, Latiolais v. Merck & Co., No. CV 06-02208 MRP (JTLx), 2007 WL 5861354, at *4 (C.D. Cal. Feb. 6, 2007) (stating that no California court has adopted the heeding presumption); Lord v. Sigueiros, No. CV 040243, 2006 WL 1510408, at *3–4 (Cal. Super. Ct. Apr. 26, 2006); Riley v. Am. Honda Motor Co., 856 P.2d 196, 200 (Mont. 1993); Rivera v. Philip Morris, Inc., 209 P.3d 271, 274–75 (Nev. 2009). Although the authors have expressed displeasure with the heeding presumption, *see* Henderson & Twerski, *supra* note 1, at 325–26, the thrust of this Article is that even with the presumption the plaintiff is still required to proffer a RAW.

59. General causation rests not on what a particular addressee would have done but on broader rules of physical science, which apply regardless of individual idiosyncrasies.

60. Henderson & Twerski, supra note 1, at 292–311.

61. *See* RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. § 2 cmt. l (1998).

62. *See supra* text accompanying notes 48–49.

63. *See supra* notes 7–8 and accompanying text.

II. DECIDED CASES DO NOT REQUIRE PROOF OF A RAW: IMPOSING LIABILITY WITHOUT PROOF OF SPECIFIC CAUSATION

From the onset of failure-to-warn litigation until quite recently, courts did not require the plaintiff to prove a RAW.[64] To be sure, plaintiffs during this period often appear to have suggested warnings that defendants should have given attendant to the sale of their products,[65] but courts have not required the kind of specificity that we have suggested in this Article.[66] The focus for most courts has been the inadequacy of the warning given by the defendant; juries have been permitted to find causation based on their intuition that some undefined warning would have been read and heeded.[67] Had the plaintiffs been required to set out a RAW with greater specificity, it is more likely that the defendants would have been granted judgment as a matter of law.[68] Rather than focus on the size, placement, and intensity of an alternative warning, the plaintiffs were allowed to posit that some warning would have changed their behavior.[69]

A much-cited early case illustrates how the traditional approach tended to eliminate any requirement of specific causation. In *Moran v. Faberge, Inc.*,[70] the plaintiff, a seventeen-year-old girl, was visiting with friends on a warm summer night. After listening to music for a while, the group became bored.[71] With nothing better to do, the girls turned their attention to a Christmas-tree-shaped candle that was positioned on a shelf behind the couch in the clubroom.[72] The youngsters began to discuss whether the candle was scented.[73] After agreeing that it was not, one of the plaintiff's friends said "Let's make it scented."[74] She grabbed a drip bottle of Tigress cologne manufactured by Faberge and began to pour its contents onto the candle somewhat below the flame.[75] A burst of fire shot out from the candle, burning the plaintiff's neck and breast.[76] A jury found for the plaintiff and awarded her substantial damages.[77] The trial judge granted Faberge's motion for judgment notwithstanding the verdict,[78] which was subsequently upheld by an intermediate Maryland appellate court.[79] On appeal, the Maryland Supreme Court

---

64. To determine whether courts required a "reasonable alternative warning," we searched both WestlawNext and Lexis Advance using "alternat!/2warn!/p 'failure to warn'" as the basis of our search. The query was run in the database containing all state and federal cases. The search was limited to opinions written between January 1, 1970, and December 31, 1999.

65. *See infra* text accompanying notes 70–110.

66. *See infra* text accompanying notes 70–110.

67. *See infra* note 110.

68. *See infra* text accompanying notes 70–110.

69. *See infra* text accompanying notes 70–110.

70. 332 A.2d 11 (Md. 1975), *rev'g* 313 A.2d 527 (1974).

71. *Id.* at 13.

72. *Id.*

73. *Id.*

74. *Id.*

75. *Id.*

76. *Id.*

77. *Id.* at n.2.

78. *Id.*

79. Moran v. Williams, 313 A.2d 527 (Md. Ct. Spec. App. 1974), *rev'd*, 332 A.2d 11

reversed and reinstated the jury's finding that Faberge had knowledge that cologne was a dangerous combustible product and that it was foreseeable that it might cause a fire.[80] Tigress cologne had been accident-free for twenty-seven years.[81] The vapors from the cologne become flammable only when positioned within one-quarter inch of an open flame.[82]

The Maryland high court focused almost exclusively on the foreseeability of the cologne's flammability.[83] No one proposed a specific warning; the plaintiff simply argued that there was no warning that the cologne was flammable. But what should the warning have said and how emphatic should the warning have been? Should it have been a four-inch warning in blazing red that said "WARNING: COLOGNE IS FLAMMABLE"? Or should the warning have been written in smaller letters stating that cologne is flammable when brought within one-quarter inch of a flame? To create the impression that there was a huge danger of flammability from use of a drip bottle of cologne would have been a gross overstatement of the flammability of cologne. On the other hand, a warning written in smaller letters that cologne is flammable only when brought within one-quarter inch of a flame is less likely to be read or heeded. The plaintiff might have admitted that neither she nor her friend read the label but merely glanced at it before dousing the candle with the cologne. The plaintiff escaped these difficult specific causation questions because she did not have to propose a RAW. In any event, these considerations were lost on the Maryland Supreme Court. The judicial intuition that some unarticulated warning would have prevented her injury was, in the court's view, sufficient to support a finding of causation.

The failure of the plaintiff to set forth a RAW as part of his prima facie case was even more egregious in *Liriano v. Hobart Corp*.[84] The plaintiff, a seventeen-year-old immigrant from the Dominican Republic, was injured while operating a Hobart meat grinder in a supermarket.[85] The grinder was thirty years old and was originally equipped with a barrier guard permanently riveted onto the part of the machine in which meat was placed.[86] The guard permitted small pieces of meat to enter the machine for grinding but protected the user from pushing his or her hand down toward the grinding mechanism.[87] Shortly before the accident an

---

(Md. 1975).

80. *Faberge, Inc.*, 332 A.2d at 21.

81. *Id.* at 24.

82. *Id.*

83. *Id.* at 16–21.

84. 170 F.3d 264 (2d Cir. 1999). The facts of *Liriano v. Hobart Corp.*, summarized in the text, are fully expounded in Brief of Defendant, 700 N.E.2d 303 (N.Y. 1998) (Nos. 96-96441L & 97-7449), 1998 WL 34152546, at *2–5. It should be noted that *Liriano v. Hobart Corp.* had been litigated before the Second Circuit once before. Liriano v. Hobart Corp. (*Liriano I*), 132 F.3d 124 (2d Cir. 1998). In *Liriano I*, the circuit certified to the New York Court of Appeals the question whether a manufacturer had a postsale duty to warn when there had been a substantial modification of the product that would have precluded liability for design defect. *Id.* The New York Court of Appeals answered that question in the affirmative, Liriano v. Hobart Corp. (*Liriano II*), 700 N.E.2d 303 (N.Y. 1998), and remanded the case to the Second Circuit to decide whether the verdict for the plaintiff based on failure to warn should be upheld.

85. Brief of Defendant, *supra* note 84, at *2.

86. *Liriano I*, 132 F.3d at 125.

87. *Id.*

employee of the supermarket sawed off the safety guard.[88] The plaintiff, while feeding meat into the grinder, placed his hand so that it became enmeshed with the "grinding worm," resulting in the amputation of his right hand and forearm.[89]

The case was tried in federal district court solely on the ground that Hobart had knowledge that, over the years, other employers had removed similar safety guards on other machines and that Hobart failed to provide a postsale warning of the dangers of operating the grinder without a safety guard.[90] The jury found for the plaintiff, and the defendant appealed the judgment to the Second Circuit.[91] Speaking for the majority, Judge Calabresi found that even if the danger were obvious (and thus not requiring a warning to the effect that injury might occur),[92] Hobart had a duty to warn employees that they need not accept the risks of using unguarded grinders.[93] At no point in the court's decision is there any discussion of the text of such a warning and where it should have been placed. It was enough that there was a failure to warn. However, the failure to specify the text and desired placement of a warning was crucial to resolving the causation issue. Would a warning that the employee need not accept the risks of an unguarded grinder have made a difference in this case? The plaintiff understood and read very little English at the time of the accident.[94] Should the warning have been multilingual on every Hobart grinder? Was it possible to communicate the desired warning through the use of a pictorial? We doubt that a court forced to respond to these issues would have found adequate evidence of but-for causation.[95] It was altogether too easy to move from a finding of inadequate warning to an intuitive finding of causation because the court did not deem it necessary to specify a RAW.

Saladino v. Stewart & Stevenson Services, Inc.[96] is another example where the court found it unnecessary for the plaintiff to specify a RAW, resulting in a questionable finding of specific causation. The plaintiff in *Saladino* was rendered a quadriplegic when a baggage tractor in which he was sitting approached an aircraft that was conducting an engine test.[97] Jet wash from the engine caused the tractor's hood to lift up and strike the plaintiff in the head.[98] The plaintiff brought an action against the manufacturer of the tractor for both design defect and failure to warn.[99] Prior to the accident, the tractor had been taken out of commission because four

88. *Id.*
89. *Id.*
90. Liriano v. Hobart Corp., 170 F.3d 264, 266 (2d Cir. 1999).
91. *Id.* at 264.
92. *Id.* at 269 & n.4.
93. *Id.* at 271.
94. Brief of Defendant, *supra* note 84, at *2.
95. Judge Calabresi relied on a heeding presumption to conclude that causation was established. However, without establishing what the warning should have said, one cannot properly conclude that causation has been established. The court's statement that the burden fell on the defendant to prove that the failure to warn was not the cause of the injury rings hollow. Liriano v. Hobart Corp., 170 F.3d at 271. The defendant could not rebut the presumption without knowing the nature of the warning that the plaintiff proposed.
96. No. 01-CV-7644 (SLT)(JMA), 2007 WL 4285377 (E.D.N.Y. Dec. 3, 2007).
97. *Id.* at *2.
98. *Id.*
99. *Id.* at *4–11.

components that would have prevented the plaintiff's injury had been removed.[100] The trial court found that there had been substantial modification of the tractor and granted the defendant's motion to dismiss on the design defect claim.[101] Turning to the failure to warn claim, the court noted that it was alleged "without much specificity"[102] but denied summary judgment, holding that there were issues of material fact as to whether the plaintiff knew of the danger of the hood flying off its hinges as a result of jet wash.[103] After a full trial, a jury awarded the plaintiff damages in excess of $48 million.[104]

After posttrial motions, the trial court upheld the jury finding of failure to warn on the grounds that the manufacturer of the baggage tractor knew that its tractors could be used in various states of disrepair and that it had a duty to warn that the hood, under pressure from jet wash, could invade the passenger compartment and cause injury.[105] The plaintiff's testimony that he would have heeded a warning had it been given was sufficient to show causation.[106] On appeal to the Second Circuit, the defendant argued that "plaintiffs' case was legally insufficient because . . . plaintiffs were required to 'present expert proof regarding the feasibility, actual content, form and placement of a proposed warning.'"[107] The court rejected the defendant's argument, concluding that a jury could understand the mechanism that caused the injury as well as the need for a warning that under extreme pressure from jet wash the hood would rotate into the passenger compartment of the tractor.[108]

The failure of the court to require the plaintiff to suggest a RAW was crucial to a determination of causation in this case. It is not clear whether a warning should have been placed on the baggage tractor. Perhaps the warning should have been in a user's manual. If the plaintiff had never looked at or read the user's manual, then causation could not be established. Furthermore, the text of the warning would have needed to indicate that the danger from jet wash arose when the other component parts of the tractor were missing. The plaintiff was aware, in general, of the dangers of jet wash; he claimed not to be aware, however, that without the missing components the hood could enter the passenger compartment when subjected to jet wash.[109] How a warning could have been worded to account for this contingency was never raised at trial. Moreover, any chance of determining whether a proposed RAW would have prevented the plaintiff's harm would require that such an alternative warning be identified. The court absolved the plaintiff of his duty to offer such a warning as part of his prima facie case.[110]

---

100. *Id.* at *2.

101. *Id.* at *9.

102. *Id.*

103. *Id.* at *9–11.

104. Saladino v. Am. Airlines, Inc., 500 F. App'x 69, 70 (2d Cir. 2013).

105. Saladino v. Stewart & Stevenson Servs., Inc., 704 F. Supp. 2d 237, 249 (E.D.N.Y. 2010).

106. *Id.*

107. *Am. Airlines, Inc.*, 500 F. App'x at 72–73.

108. *Id.*

109. *See Stewart & Stevenson Servs., Inc.*, No. 01-CV-7644 (SLT)(JMA), 2007 WL 4285377, at *10 (E.D.N.Y. Dec. 3, 2007).

110. Other cases that did not require a RAW raise serious questions as to whether, if specificity had been required, plaintiffs would have been able to survive a defense motion

III. CASES REQUIRING A RAW TO ESTABLISH SPECIFIC CAUSATION

A few courts have realized that without a RAW they are incapable of deciding whether a plaintiff has established causation. In *Cuntan v. Hitachi Koki USA, Ltd.*,[111] an experienced carpenter was cutting plywood using a power saw manufactured by the defendant. After he removed his finger from the saw's trigger switch to deactivate its motor, the plaintiff set the saw down on a grass surface.[112] According to the plaintiff, the saw continued to operate and it traveled several feet across the ground.[113] The saw came into contact with the plaintiff's left hand, causing serious injury.[114] The plaintiff alleged both design defect and failure to warn.[115] The court dismissed the design-defect claim because the plaintiff failed to present expert testimony as to the availability of a RAD.[116] The court then dealt with the plaintiff's claim that the warnings of the risks of an operating blade were inadequate because "the warnings 'should have been prominently displayed on the machine with warning labels in color with pictogram [sic] and other remarkable language, color and print to make this danger obvious to the operator.'"[117] The court granted summary judgment for the defendant, holding that even if it were to credit the plaintiff's assertion that a different warning would have altered his behavior, "he ha[d] failed to offer any alternatives for the jury to consider."[118]

In *Koken v. Black & Veatch Construction, Inc.*,[119] the insurer of a contractor and subcontractor brought suit against Auburn Manufacturing, Inc. for $9 million in damages after one of its fire blankets caught fire resulting in extensive damage to a generator covered by the blanket.[120] The heart of the case was that Auburn had not

---

for summary judgment or directed verdict. *See, e.g.*, Ayers v. Johnson & Johnson Baby Prods., Co., 818 P.2d 1337 (Wash. 1991) (holding that the plaintiff did not have to provide a RAW where the plaintiff's infant aspirated baby oil that had been transferred to another bottle and suffered severe injury). *But see* Fraust v. Swift & Co., 610 F. Supp. 711 (W.D. Pa. 1985) (denying the defendant's motion for summary judgment where the plaintiffs alleged failure to warn when their sixteen-month-old child suffered brain damage after choking on peanut butter, claiming that peanut butter should not be fed to children under four years old but not suggesting the text, size, and placement of such a warning); Emery v. Federated Foods, Inc., 863 P.2d 426 (Mont. 1993) (denying the defendant's motion for summary judgment where a two-year-old child choked on marshmallows and the plaintiff did not suggest the text, size, or placement of a warning); Bryant v. Adams, 448 S.E.2d 832 (N.C. Ct. App. 1994) (denying the defendant's motion for summary judgment where the plaintiff claimed that a trampoline should have had multiple warnings of dangers to users, but did not supply specific suggestions as to the text, size, and placement of such a warning); Ayers v. Johnson & Johnson Baby Prods., Co., 797 P.2d 527, 533 (Wash. Ct. App. 1990) (Reed, J., dissenting).

111. No. 06-CV-3898 (RRM)(CLP), 2009 WL 3334364 (E.D.N.Y. Oct. 15, 2009).

112. *Id.* at *2.

113. *Id.*

114. *Id.*

115. *Id.* at *4.

116. *Id.* at *11.

117. *Id.* at *16 (alteration in original) (citation omitted).

118. *Id.* at *17.

119. 426 F.3d 39 (1st Cir. 2005).

120. The fire was quickly put out by a fire extinguisher, but the chemicals in the fire extinguisher caused damage to the generator. *Id.* at 43.

provided adequate warnings about the possible dangers of fire that might occur with the use of its fire blankets. An Auburn fire blanket was used to cover plywood that in turn covered the generator.[121] While an employee was cutting a steel lug, a molten slug fell on the fire blanket, which melted the blanket and precipitated a fire.[122] The federal district court granted summary judgment in favor of the defendant Auburn.[123] On appeal to the First Circuit, the plaintiff argued that "it was not the plaintiff's obligation to articulate a particular suggested warning, but rather the entire duty to warn question should . . . be thrown to the jury."[124] The court said that this position "completely misunderstands the plaintiff's burden in a negligence action. It is the plaintiff's burden to establish a duty to warn and to prove proximate causation of loss resulting from the failure to warn."[125]

The court said that "[t]hankfully, the appellants have not rested on such a completely unsupportable position"[126] but rather the plaintiff offered four different suggested warnings. One suggested warning was that the fire blanket was "1000 degrees rated."[127] The plaintiff argued that, had the blanket been so labeled, the employee would have consulted his foreman.[128] The court noted that there was no testimony by the foreman as to what he would have done in response to the employee's hypothetical inquiry.[129] Nor was there evidence that an ordinary employee would have understood what the 1000-degree rating meant with regard to its resistance to fire.[130] A second suggested warning was that the fire blanket was "not suitable for horizontal capture of concentrated spatter and red-hot cut pieces."[131] Although such a warning would have been appropriate, the court once again found no proximate cause because there was no evidence that there was horizontal capture of concentrated spatter or red-hot cut pieces, or that molten slag is the equivalent of concentrated spatter.[132] The plaintiff's expert did suggest a third possible warning, stating the blanket was "not appropriate for cutting operations."[133] However, the expert's testimony supporting such a warning was disqualified since he could not articulate any methodology for determining the appropriateness of a 1000-degree rated fire blanket for particular operations.[134]

Once the court rejected the proposition that the plaintiff could simply allege that a warning should have been given without articulating what the warning should

---

121. *Id.*

122. *Id.*

123. Koken v. Auburn Mfg., Inc., No. CIV. 02-83-B-C, 2004 WL 2358194, at *1 (D. Me. Oct. 15, 2004).

124. *Black & Veatch Construction, Inc.*, 426 F.3d at 46.

125. *Id.* at 46–47.

126. *Id.* at 47.

127. *Id.* at 48.

128. *Id.* at 49.

129. *Id.*

130. *Id.*

131. *Id.*

132. *Id.* at 50–51.

133. *Id.* at 47.

134. The court held that the plaintiff's expert testimony did not meet the requirement for reliability set forth in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 590 (1993). *See Black & Veatch Construction, Inc.*, 426 F.3d at 47.

have said, the plaintiff-insurer had to make its case based on specific articulated warnings. Since the plaintiff was unable to prove that any of the suggested warnings would have prevented the damage to the generator, the court was justified in upholding summary judgment in favor of the defendant.[135]

IV. THE RAW PROPOSAL

We come to our proposal informed by lessons learned from our experience as reporters for the *Restatement (Third)*. In recommending the appropriate test for determining design defect in that project, we followed the majority position that imposes upon the plaintiff the burden of proving a RAD rather than the minority position that allows the plaintiff to recover by merely showing that the product's design disappoints consumer expectations.[136] We, like most courts, reject the latter test as standardless, collapsing defect and causation into a single issue that a jury is permitted to resolve intuitively based on amorphous consumer expectations.[137] In like fashion, allowing the plaintiff to allege failure to warn without specifically setting forth the relevant details—the medium and, if written, the text, placement, color, and size of the proposed warning—condones a cause of action without any standard and allows a jury to intuit causation without being required to test its finding against what a real-world warning would have said.

The *Moran* case discussed earlier illustrates the dilemma that drafters of warnings invariably face.[138] On the one hand, a warning in four-inch red letters on a bottle of cologne that reads "FLAMMABLE" is not only ambiguous—it is downright misleading. It surely is inappropriate to tell consumers that one should not smoke in a room in which the cap has been removed from a cologne bottle. On the other hand, a warning that says "Do Not Smoke While Applying Cologne to Your Face. It Can Cause a Fire." is too narrowly focused. A narrowly focused warning invites the defendant to argue that other kinds of conduct in which people may engage are not mentioned. If this were a valid argument, the defendant would be forced to set forth a laundry list of various scenarios that could lead to fire hazards. The plaintiff should be required to offer an alternative warning with

---

135. For other cases supporting the thesis that causation may be difficult to establish when a RAW is required, see, e.g., Laspesa v. Arrow Int'l, Inc., No. 07cv12370-NG, 2009 WL 5217030 (D. Mass. Dec. 23, 2009); Watson v. Electrolux Prof'l Outdoor Prods., Inc., No. 04-11782-DPW, 2006 WL 2246416 (D. Mass. Aug. 4, 2006); St. Laurent v. Metso Mineral Indus., Inc., No. CIV. 04-CV-14-SM, 2005 WL 2277058 (D.N.H. Sept. 13, 2005); Barban v. Rheem Textile Sys., Inc., No. 01-CV-8475 (ILG), 2005 WL 387660 (E.D.N.Y. Feb. 11, 2005); G.E. Capital Corp. v. A.O. Smith Corp., No. 01 Civ.1849 LAP, 2003 WL 21498901 (S.D.N.Y. July 1, 2003); Morgen v. Ford Motor Co., 797 N.E.2d 1146 (Ind. 2003).

136. *See* Twerski & Henderson, *supra* note 5, at 1094–1106.

137. *See* OWEN, *supra* note 23, § 8.3; James A. Henderson, Jr. & Aaron D. Twerski, *Achieving Consensus on Defective Product Design*, 83 CORNELL L. REV. 867, 879–82 (1998); James A. Henderson, Jr. & Aaron D. Twerski, Essay, *Intuition and Technology in Product Design Litigation: An Essay on Proximate Causation*, 88 GEO. L.J. 659, 678–83 (2000).

138. Moran v. Faberge, Inc., 332 A.2d 11 (Md. 1975), *rev'g* Moran v. Williams, 313 A.2d 527 (Md. Ct. Spec. App. 1974).

sufficient specificity to signal a fire risk in some circumstances and then to convince a court or jury that such a warning would have avoided injury to the plaintiff.

We do not pretend that drafting warnings is an easy task, and we recognize that fact patterns like *Moran* are particularly challenging. But the difficulties should not be overstated. In many cases, plaintiffs will be able to construct RAWs that are sufficiently credible so that a fact finder may conclude that the failures to warn caused the injuries suffered by the plaintiffs. We appreciate that courts faced with *Moran*-like problems may be motivated to wink at the formal requisites of the law that demand proof of defect and cause; as one of the authors has developed elsewhere, what may actually be happening in some of these cases is that courts are imposing a form of enterprise liability, in which risk-creating enterprises are held strictly liable in tort for the harm their activities cause.[139] *Liriano* may also be such a case.[140] One can sympathize with Judge Calabresi's desire to compensate a young man who suffered such a tragic injury. However, in doing so he tortured the law of warning and causation beyond recognition. Allowing plaintiffs to reach juries in these cases might be warranted under an enterprise liability rationale.[141] Our point here is that requiring a RAW would reveal why traditional failure-to-warn doctrine is an inadequate vehicle by which to reach those outcomes.

It is not our contention that the plaintiff must allege a specific warning at the pleading stage. No such requirement is imposed on plaintiffs in cases involving design defects. However, analogous to a case based on design defect where the plaintiff must, during discovery, set forth with some particularity the alternative design that would have avoided or reduced the injury, so in a warning case the plaintiff should be required to spell out the text, location, size, and mode of warning (verbal or pictorial). Failure to provide the reasonable alternative design or warning should allow the defendant to prevail on a motion for summary judgment. In both the design and warning situations, whether the plaintiff has provided sufficient detail for the alternative design or warning calls for judicial discretion. If the trial judge finds that adequate detail has been provided, the issue becomes one for the trier of fact.

Once the plaintiff sets forth the RAW, the defendant will likely argue that the proposed warning would not have made a difference and that the plaintiff has not proven specific causation. Furthermore, the defendant may argue that if the RAW proffered by the plaintiff should have been given, a multiplicity of warnings of the same risk level would have to be given as well. Thus, once the plaintiff must articulate the RAW with some specificity, the defendant is in a position to support the claim that the RAW would either have been ineffectual or would have spawned a spate of warnings that would have created sensory overload and would have rendered the suggested RAW practically useless.

---

139. *See generally* James A. Henderson, Jr., *Echoes of Enterprise Liability in Product Design and Marketing Litigation*, 87 CORNELL L. REV. 958 (2002) (arguing that courts sometimes impose sensible forms of enterprise liability by stretching traditional doctrine beyond its limits).

140. Liriano v. Hobart Corp., 170 F.3d 264 (2d Cir. 1999).

141. *See supra* note 139 and accompanying text.

CONCLUSION

Design-defect and failure-to-warn cases share the same structural elements. Just as the defendant cannot defend a case premised on defective design without knowing the specifics of how the plaintiff would redesign the product to make it safer, so with regard to defective warnings the plaintiff cannot challenge the reasonableness of the defendant's marketing or whether better warnings would have saved the plaintiff from injury without knowing the specifics of the proposed warnings. No court would accept as adequate a statement by the plaintiff that she has a general idea for a RAD, and no court should accept a similar generalization for a RAW.

For understandable reasons, failure to warn is a doctrine that has tended to lack rigor. It is altogether too easy to conclude that a product seller should have said something more in order to alert a user or consumer about a risk. However, even when one can establish that there was a failure to warn, tort law requires that the omission be causally related to the plaintiff's injury. That many courts have adopted a presumption that if a warning had been given it would have been heeded[142] does not resolve the causation problem identified in this Article. In fairness, the defendant cannot rebut the heeding presumption unless the plaintiff identifies the warning that should have been given. One of the authors suspects that some form of enterprise liability may best describe the courts' reactions to the difficulties described herein.[143] But given the certainty that courts will continue to apply a failure-to-warn analysis, we argue that the plaintiff should be required to prove a RAW to establish a prima facie case. It is our hope that this Article will serve as the beginning of a fruitful dialogue.

---

142. The first case to adopt a heeding presumption was *Technical Chemical Co. v. Jacobs*, 480 S.W.2d 602, 606 (Tex. 1972). Other states have followed suit. *See, e.g.*, Nissen Trampoline Co. v. Terre Haute First Nat'l Bank, 332 N.E.2d 820, 826 (Ind. Ct. App. 1975), *rev'd on other grounds*, 358 N.E.2d 974 (Ind. 1976); Coffman v. Keene Corp., 628 A.2d 710, 720 (N.J. 1993); Seley v. G.D. Searle & Co., 423 N.E.2d 831, 838 (Ohio 1981); Cunningham v. Charles Pfizer & Co., 532 P.2d 1377, 1382 (Okla. 1974). Several jurisdictions, however, have refused to adopt a heeding presumption. *See, e.g.*, Latiolais v. Merck & Co., No. CV 06-02208 MRP (JTLx), 2007 WL 5861354, at *4 (C.D. Cal. Feb. 6, 2007) (stating that no California court has adopted the heeding presumption); Lord v. Sigueiros, No. CV 040243, 2006 WL 1510408, at *3–4 (Cal. Super. Ct. Apr. 26, 2006); Riley v. Am. Honda Motor Co., 856 P.2d 196, 200 (Mont. 1993); Rivera v. Philip Morris, Inc., 209 P.3d 271, 274–75 (Nev. 2009).

143. *See supra* note 139 and accompanying text.